In the Claims:

1 - 90. (cancelled)

91. (new) Tooling which is adapted to be secured to the movable end of a computer-controlled robotic arm, by which in use articles can be picked up from one position, optionally rotated in transit and lowered into a second position, which tooling comprises: two blades each having a leading edge and trailing edge, and both being movable between a first position in which their leading edges are separated by a large gap and a second position in which the leading edges overlap, or are in contact or are separated by a smaller gap; and drive means for effecting relative movement between the two blades for moving them between the first and second positions, whereby in use with the blades in the first position the tooling can be lowered so that the undersides of the two blades just make contact with a surface on which an article is resting with the two leading edges of the blades on opposite sides of the article and the latter can be picked up by the blades by operating the drive means so as to move the blades into their second position below the article; and further comprising a resilient movement restraining mechanism including article engaging means which in use is adapted to remain stationary while the blades move relatively thereto, whereby the engagement between the article engaging means and the article will resist lateral or rotational movement of the article relative to the blades as a result of movement thereof, thereby in use to prevent any unwanted rotational skewing or twisting or lateral movement of an article relative to the blades as the latter slide therebelow.

92. (new) Tooling as claimed in claim 91 wherein each of the trailing edges of the blades includes an upstanding lip or ridge or wall which in use will engage opposite edge regions of the article when the blades occupy their second position.

93. (new) Tooling as claimed in claim 91, wherein the movement restraining mechanism comprises at least one spike which points generally perpendicularly towards a plane containing

the two blades so that as the tooling is lowered onto an article the spike penetrates the article before the blades make contact with a surface on which the article rests.

94. (new) Tooling as claimed in claim 91, wherein the movement restraining mechanism comprises at least one spike which points generally perpendicularly towards a plane containing the two blades so that as the tooling is lowered onto an article the spike penetrates the article before the blades make contact with a surface on which the article rests, and wherein the engagement of the spike and the article prevents lateral or rotational movement of the latter as the blades subsequently slide below the article either to pick up or release it.

95. (new) Tooling as claimed in claim 91, wherein the movement restraining mechanism comprises at least one spike which points generally perpendicularly towards a plane containing the two blades so that as the tooling is lowered onto an article the spike penetrates the article before the blades make contact with a surface on which the article rests, and wherein the movement restraining device further comprises ejector means which acts to push an article off the spike, as the blades move towards their second open position, so as in use to prevent an article remaining impaled on the spike, after the blades are opened to release the article.

96. (new) Tooling as claimed in claim 91, wherein the movement restraining mechanism comprises at least one spike which points generally perpendicularly towards a plane containing the two blades so that as the tooling is lowered onto an article the spike penetrates the article before the blades make contact with a surface on which the article rests, and wherein the movement restraining device further comprises ejector means which acts to push an article off the spike, as the blades move towards their second open position, so as in use to prevent an article remaining impaled on the spike, after the blades are opened to release the article, and wherein the ejector means comprises at least one pin which is withdrawn upwardly as the blades move into their first, closed position but is moved downwardly into a protruding position as the blades move into their second, open position, so as to push an article in a similar downward direction, off the spike.

97. (new) Tooling as claimed in claim 91, wherein the movement restraining mechanism comprises at least one resiliently deformable member located above the plane containing the two blades, and spaced therefrom, so that in use as the tooling is lowered onto an article, the underside of the deformable member engages the upper surface of the article and the member becomes deformed in order to accommodate the thickness of the article before the blades make contact with a surface on which the article rests, the resulting downward force on the article, and frictional resistance to movement between the deformable member and the article, serving to restrain the latter from moving under the influence of subsequent blade movement therebelow, either to pick up or to release the article.

98. (new) Tooling as claimed in claim 91, wherein the movement restraining mechanism comprises at least one resiliently deformable member located above the plane containing the two blades, and spaced therefrom, so that in use as the tooling is lowered onto an article, the underside of the deformable member engages the upper surface of the article and the member becomes deformed in order to accommodate the thickness of the article before the blades make contact with a surface on which the article rests, the resulting downward force on the article, and frictional resistance to movement between the deformable member and the article, serving to restrain the latter from moving under the influence of subsequent blade movement therebelow, either to pick up or to release the article and wherein the deformable means comprises a block of resiliently deformable material, a sprung plate or block, or a dished plate of spring steel or the like.

99. (new) Tooling as claimed in claim 91, wherein the movement restraining mechanism comprises at least one resiliently deformable member located above the plane containing the two blades, and spaced therefrom, so that in use as the tooling is lowered onto an article, the underside of the deformable member engages the upper surface of the article and the member becomes deformed in order to accommodate the thickness of the article before the blades make contact with a surface on which the article rests, the resulting downward force on the article, and frictional resistance to movement between the deformable member and the article, serving to

restrain the latter from moving under the influence of subsequent blade movement therebelow, either to pick up or to release the article and wherein the deformable member comprises at least one metal spring finger, having lateral stiffness but being adapted to deflect resiliently in an upward direction, relative to the blades.

100. (new) Tooling as claimed in claim 91, wherein the movement restraining mechanism comprises at least one resiliently deformable member located above the plane containing the two blades, and spaced therefrom, so that in use as the tooling is lowered onto an article, the underside of the deformable member engages the upper surface of the article and the member becomes deformed in order to accommodate the thickness of the article before the blades make contact with a surface on which the article rests, the resulting downward force on the article, and frictional resistance to movement between the deformable member and the article, serving to restrain the latter from moving under the influence of subsequent blade movement therebelow, either to pick up or to release the article and wherein the deformable member comprises at least one metal spring finger which is bent so as to point downwardly to engage the upper surface of the article, but which can be more or less flattened by an upward force, so as to accommodate the thickness of the article.

101. (new) Tooling as claimed in claim 91, wherein the movement restraining mechanism comprises a vacuum chuck which is adapted to become vacuum clamped to the upper surface of the article as the tooling moves downwardly onto the article, the vacuum clamping serving to resist movement of the article as the blades subsequently slide therebelow either to pick up or release the article.

102. (new) Tooling as claimed in claim 91, wherein in use rotation of an article in transit between the first and second positions is achieved by rotating one part of the robotic arm relative to another part thereof, or by rotating the tooling relative to the robotic arm.

103. (new) Tooling as claimed in claim 91, wherein a support member is positioned above each of the blades, and drive means is provided for moving each support member and each of the blades which in use operates to move both the support members and the blades until an article is gripped between the support members, and thereafter to move only the blades below the article, the drive means maintaining the support members in the article gripping position as the blades are subsequently withdrawn from below the article to prevent frictional drag on the underside of the latter from separating or moving the article.

104. (new) Tooling as claimed in claim 91, wherein a support member is positioned above each of the blades, and drive means is provided for moving each support member and each of the blades which in use operates to move both the support members and the blades until an article is gripped between the support members, and thereafter to move only the blades below the article, the drive means maintaining the support members in the article gripping position as the blades are subsequently withdrawn from below the article to prevent frictional drag on the underside of the latter from separating or moving the article and wherein the drive means only operates to disengage the support members from the article after the blades have moved from below the article.

105. (new) Tooling as claimed in claim 91, wherein a support member is positioned above each of the blades, and drive means is provided for moving each support member and each of the blades which in use operates to move both the support members and the blades until an article is gripped between the support members, and thereafter to move only the blades below the article, the drive means maintaining the support members in the article gripping position as the blades are subsequently withdrawn from below the article to prevent frictional drag on the underside of the latter from separating or moving the article, and wherein a drive for the support members includes a lost motion connection in combination with a low spring rate compression spring which is compressed to the extent of an overrun created by the lost motion connection, and provides the lateral gripping force on the article when the support members are moved into article engagement, and also ensures that the lost motion is accommodated as the drive retracts.

106. (new) Tooling as claimed in claim 91, wherein a support member is positioned above each of the blades, and drive means is provided for moving each support member and each of the blades which in use operates to move both the support members and the blades until an article is gripped between the support members, and thereafter to move only the blades below the article, the drive means maintaining the support members in the article gripping position as the blades are subsequently withdrawn from below the article to prevent frictional drag on the underside of the latter from separating or moving the article, and wherein a first double acting pneumatic cylinder is adapted to move the blades and support members as a single unit, and a second double acting pneumatic cylinder is adapted to move the blades relative to the support members.

107. (new) Tooling as claimed in claim 91, wherein a support member is positioned above each of the blades, and drive means is provided for moving each support member and each of the blades which in use operates to move both the support members and the blades until an article is gripped between the support members, and thereafter to move only the blades below the article, the drive means maintaining the support members in the article gripping position as the blades are subsequently withdrawn from below the article to prevent frictional drag on the underside of the latter from separating or moving the article, and wherein each support member is in sliding contact with the upper surface of the blade with which it is associated, so that the relative movement during closure on product and/or during opening to release the product, acts in a self-cleaning manner in that the support member scrapes clean the upper surface of the blade.

108. (new) Tooling as claimed in claim 91, wherein a support member is positioned above each of the blades, and drive means is provided for moving each support member and each of the blades which in use operates to move both the support members and the blades until an article is gripped between the support members, and thereafter to move only the blades below the article, the drive means maintaining the support members in the article gripping position as the blades are subsequently withdrawn from below the article to prevent frictional drag on the underside of the latter from separating or moving the article, and wherein, after movement of the article to the

said second position, the drive means is operated to retract the blades so as to align with the inner faces of the support members and thereafter the drive means is operated to retract both blades and support members in synchronism, by a distance just sufficient to release the article, so that the position of the article relative to the support surface remains substantially undisturbed from that determined by the position to which the tool has been moved.

109. (new) Tooling as claimed in claim 91, wherein a support member is positioned above each of the blades, and drive means is provided for moving each support member and each of the blades which in use operates to move both the support members and the blades until an article is gripped between the support members, and thereafter to move only the blades below the article, the drive means maintaining the support members in the article gripping position as the blades are subsequently withdrawn from below the article to prevent frictional drag on the underside of the latter from separating or moving the article, and wherein, after movement of the article to the said second position, the drive means is operated to retract the blades so as to align with the inner faces of the support members and thereafter the drive means is operated to retract both blades and support members in synchronism, by a distance just sufficient to release the article, so that the position of the article relative to the support surface remains substantially undisturbed from that determined by the position to which the tool has been moved, and wherein the tool is raised vertically clear of the article while the support members continue to locate the article in position until the tool has been raised clear thereof, after which the drive means is operated to fully retract the support members and the blades.

110. (new) Tooling as claimed in claim 91, wherein a support member is positioned above each of the blades, and drive means is provided for moving each support member and each of the blades which in use operates to move both the support members and the blades until an article is gripped between the support members, and thereafter to move only the blades below the article, the drive means maintaining the support members in the article gripping position as the blades are subsequently withdrawn from below the article to prevent frictional drag on the underside of the latter from separating or moving the article, and wherein, after movement of the article to the

said second position, the drive means is operated to retract the blades so as to align with the inner faces of the support members and thereafter the drive means is operated to retract both blades and support members in synchronism, by a distance just sufficient to release the article, so that the position of the article relative to the support surface remains substantially undisturbed from that determined by the position to which the tool has been moved, and wherein the tool is raised vertically clear of the article while the support members continue to locate the article in position until the tool has been raised clear thereof, after which the drive means is operated to fully retract the support members and the blades and wherein the step of fully retracting the support members and blades is effected in transit as the tool returns to pick up another article.

111. (new) Tooling as claimed in claim 91, wherein the restraining means comprises an array of spaced apart displaceable elongate rod-like fingers which are mounted so as to extend generally normal to the plane containing the two blades, so that in use as the tool is lowered over an article with the blades retracted the lower ends of some of the fingers will engage the upper surface of the article and as a consequence will be pushed upwardly as the tool continues to move downwardly over and around the article, but other of the fingers which do not register with the article will not be pushed upwardly but will remain extended and will surround the article and in use will provide lateral support therefor as the blades subsequently move relative to the underside of the article both inwardly and outwardly.

112. (new) Tooling as claimed in claim 91, wherein the mechanism by which the two blades and/or support members (if provided) are caused to move exerts negligible torque about the torsion drive axis of the robotic arm and/or about the rotational axis between the arm and the tooling and/or about any axis about which one part of the arm can rotate relative to another part thereof.

113. (new) Tooling as claimed in claim 91, wherein the drive means acts equally and oppositely on the two blades.

114. (new) Tooling as claimed in claim 91, wherein a support member is positioned above each of the blades, and drive means is provided for moving each support member and each of the blades which in use operates to move both the support members and the blades until an article is gripped between the support members, and thereafter to move only the blades below the article, the drive means maintaining the support members in the article gripping position as the blades are subsequently withdrawn from below the article to prevent frictional drag on the underside of the latter from separating or moving the article and wherein the drive means acts equally and oppositely on the two support members.

115. (new) Tooling as claimed in claim 91, wherein the drive means acts on one of the blades and a connection between the two blades transmits drive to the other blade so as to cause each to move in an appropriate manner.

116. (new) Tooling as claimed in claim 91, wherein a support member is positioned above each of the blades, and drive means is provided for moving each support member and each of the blades which in use operates to move both the support members and the blades until an article is gripped between the support members, and thereafter to move only the blades below the article, the drive means maintaining the support members in the article gripping position as the blades are subsequently withdrawn from below the article to prevent frictional drag on the underside of the latter from separating or moving the article, wherein the drive means acts on one of the support members and a connection is provided between the two support members to transmit drive to the other support member so as to cause each support member to move in an appropriate manner.

117. (new) Tooling as claimed in claim 91, wherein the robotic arm includes a rotational drive, for rotating tooling attached thereto relative to the arm, whereby in use this is employed for orientating the tooling and therefore an article therein, during transit.

118. (new) Tooling as claimed in claim 91, wherein, in use, just prior to their inward sliding movement below an article, the blades are pressed into contact with the flat support surface on

which the article is carried, a resilient lost motion connection is provided between the blades and the robotic arm, which permits the blades to make contact with the article support surface shortly before the downward movement of the end of the robotic arm carrying the tooling is stopped, and during the final movement of the robotic arm in which the resilient lost motion connection is compressed after the blades make contact with the said surface, the energy stored in the compression of the resilient lost motion connection serves to exert a downward force on the blades which is resisted by the said surface, thereby to keep the blades in sliding contact therewith as they move towards and slide under the article, to enable the blades to close to their second position.

119. (new) Tooling as claimed in claim 91, wherein, in use, just prior to their inward sliding movement below an article, the blades are pressed into contact with the flat support surface on which the article is carried, a resilient lost motion connection is provided between the blades and the robotic arm, which permits the blades to make contact with the article support surface shortly before the downward movement of the end of the robotic arm carrying the tooling is stopped, and during the final movement of the robotic arm in which the resilient lost motion connection is compressed after the blades make contact with the said surface, the energy stored in the compression of the resilient lost motion connection serves to exert a downward force on the blades which is resisted by the said surface, thereby to keep the blades in sliding contact therewith as they move towards and slide under the article, to enable the blades to close to their second position wherein the lost motion connection is between the robotic arm and the tooling.

120. (new) Tooling as claimed in claim 91, wherein, in use, just prior to their inward sliding movement below an article, the blades are pressed into contact with the flat support surface on which the article is carried, a resilient lost motion connection is provided between the blades and the robotic arm, which permits the blades to make contact with the article support surface shortly before the downward movement of the end of the robotic arm carrying the tooling is stopped, and during the final movement of the robotic arm in which the resilient lost motion connection is compressed after the blades make contact with the said surface, the energy stored in the

determine the orientation of each article to be picked up, and to generate control signals for rotating the tooling accordingly.

126. (new) A product handling system comprising a first conveyor, a second conveyor spaced from the first, a robotic arm and computer control therefor, having tooling as claimed in claim 91 attached to its remote movable end, both arm and tooling being controllable by signals from the computer control to position the tooling around an article on one conveyor, and to slide the blades thereof below the article, and thereafter lift the article from the one conveyor by appropriately controlling the robotic arm, and moving the arm and therefore the article-containing tooling so as to position it over the other conveyor and thereafter to open the blades and deposit the article on the other conveyor.

127. (new) A product handling system comprising a first conveyor, a second conveyor spaced from the first, a robotic arm and computer control therefor, having tooling as claimed in claim 91 attached to its remote movable end, both arm and tooling being controllable by signals from the computer control to position the tooling around an article on one conveyor, and to slide the blades thereof below the article, and thereafter lift the article from the one conveyor by appropriately controlling the robotic arm, and moving the arm and therefore the article-containing tooling so as to position it over the other conveyor and thereafter to open the blades and deposit the article on the other conveyor and which includes camera means and sensor means which produce signals which are supplied to the computer, and the latter is programmed to determine therefrom the position and/or orientation and/or nature of each article on the said one conveyor, and to generate control signals to cause drives to operate to lift and/or rotate and/or lower the tooling and/or adjust the robotic arm so that the tooling is positioned at just the right time relative to an article travelling on the one conveyor to enable the tooling to pick it up therefrom, and if required to rotate it in transit, and thereafter position it on the other conveyor at precisely the right point in time and in the correct orientation, and wherein said other conveyor has trays or other containers thereon, and the viewing system and sensors are set up so as to enable the computer to identify the precise position of each tray or container relative to the robotic arm, and

compression of the resilient lost motion connection serves to exert a downward force on the blades which is resisted by the said surface, thereby to keep the blades in sliding contact therewith as they move towards and slide under the article, to enable the blades to close to their second position wherein the drive means is torsionally stiff in a plane parallel to that in which the blades move but is capable of flexing or distorting or rising and falling as by pivoting in a plane which is perpendicular to the plane in which the blades move, so as to accommodate the lost motion between the blades and the bridge.

121. (new) Tooling as claimed in claim 91, wherein the blades and support members rotate relative to one another or slide linearly relative to each other.

122. (new) Tooling as claimed in claim 91, in which the blades and support members are carried below a bridge, and the gap between the bridge and the blades is adjustable to allow different heights of article to be accommodated within the tooling.

123. (new) Tooling as claimed claim 91, wherein the article comprises two or more foodstuff portions, in a shingled array on the conveyor, and the tooling picks and places the shingled array without disturbing the relationship of the shingled portions.

124. (new) Tooling as claimed claim 91, wherein the article comprises two or more foodstuff portions, in a shingled array on the conveyor, and the tooling picks and places the shingled array without disturbing the relationship of the shingled portions and wherein the tooling is orientated relative to the shingled array so that the two blades (and if provided the support members) advance towards the array along a line which is generally orthogonal to the direction in which the portions are shingled.

125. (new) Tooling as claimed in claim 91, in combination with a viewing system which provides image signals to a robotic-arm-controlling computer, and the latter is programmed to

the computer is programmed to control the movement of the said other conveyor as well as the said one conveyor, to ensure that a specific tray or container is at a specific position at a specific time to allow a specific article picked from the one conveyor to be placed in the said tray or container by the tooling carried by the robotic arm.